JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

EDU 802: TESTS, MEASUREMENT AND EVALUATION

FIRST YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF EDUCATION IN PSYCHOLOGY.

Instructions

Answer any <u>THREE</u> questions.

1. Tests are an unnecessary evil in the education system. Discuss. **(20 Marks).**

2. (a). Explain five levels of measurement. **(10 Marks)**.

    (b). Outline five functions of evaluation. **(10 Marks).**

3. (a) Validity is the most important quality of a test that should be considered when constructing/selecting a test in social sciences. How would you ascertain the validity of a test? **(10 Marks).**

    (b). Using appropriate examples outline five levels of the cognitive domain as illustrated in the Bloom's taxonomy. **(10 Marks).**

4. (a) What is Item analysis? Clearly elaborate the procedure you would use to ascertain item analysis in a norm referenced test. **(10 Marks)**

    (b). Essay testing is largely subjective. Explain 5 ways through which you can enhance objectivity while scoring essay tests. **(10 marks).**

5. (a) The following are the scores of 40 psychology students in research methods examination. Use the information to answer the questions below;

    42, 88, 37, 75, 98, 90, 73, 62, 96, 80, 52, 76, 66, 54, 73, 69, 83, 62, 50, 79,

    69, 56, 81, 70, 52, 65, 49, 80, 67, 59, 88, 80, 44, 71, 72, 87, 91, 82, 89, 79.

    (i)   Using a class interval of 5, prepare a cumulative frequency distribution table. **(3 marks)**

    (ii). Construct a histogram and a frequency polygon. Comment on the skewness of the students' performance. **(6 marks)**

    (iii) Compute the mean and the modal mark of the psychology students' performance in research methods examination and interpret your answer. **(5 marks)**

(b). The following data refers to the scores of students in Mathematics (X) and English (Y). Using the information compute the Pearson product- moment correlation coefficient (r) of a student's performance in mathematics and his/her performance in English. Comment on your answer. **(6 marks)**

Performance in Mathematics (X)	50	49	30	11	10
Performance in English (Y)	45	50	25	10	15

Appendix A

Formulae

$$r_{xy} = \frac{\sum_{i=1}^{N} XY - (\sum X)(\sum Y)}{[N \sum X^2 - (\sum X)^2][N \sum Y^2 - (\sum Y^2)]}$$

$$\bar{X} = \frac{1}{N} \sum_{i=1}^{n} X_i f_i$$

$$Mdn = L_i + \left[\frac{\frac{N}{2} - (\sum f) b}{f_{med}}\right] c$$

$$Mo = L_i + \left[\frac{\Delta_1}{\Delta_1 - \Delta_2}\right] c$$